

# Operation Manual Manual de instrucciones

Multi-channel processor controller unit

Controlador de procesador multicanal

# AXM-P7650

English

Español

## Contents

### Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. *After you have finished reading the instructions, keep this manual in a safe place for future reference.*

#### ① Before You Start

About this manual	4
About this unit	4
About digital and analog source	4
Precautions	5
Use and care of the remote control	5
Using the remote control operation mode switch	6
Reverse mode	6
Dolby Digital/DTS compatibility	6

#### ② What's What

Display unit	7
Remote control	7

#### ③ Basic Operations

Turning the unit on	10
Selecting a source	10
Adjusting the volume	10
Turning the unit off	10

#### ④ DVD Player

Function menu switching	11
Repeating play	11
Playing tracks in a random order	11
Scanning tracks of a CD	11
Pausing playback	11
Resume playback (Bookmark)	11

#### ⑤ TV tuner

Using the TV tuner	13
Storing and recalling broadcast stations	13
Storing the strongest broadcast stations sequentially	13

#### ⑥ Multi-CD Player

Playing a CD	14
50-disc multi-CD player	14

Introduction of advanced multi-CD player operation	15
Repeating play	15
Playing tracks in a random order	15
Scanning CDs and tracks	16
Pausing CD playback	16
Using ITS playlists	16
Using disc title functions	18
Using CD TEXT functions	18
Using compression and bass emphasis	19

#### ⑦ Digital Signal Processor

Introduction of DSP adjustments	20
Using the sound field control	21
Using the position selector	22
Using balance adjustment	22
Adjusting source levels	22
Using the dynamic range control	23
Using the direct control	23
Using the Dolby Pro Logic II	23
Using the down-mix function	24
Setting the speaker setting	24
Selecting a cross-over frequency	25
Adjusting the speaker output levels	26
Adjusting the speaker output levels using a test tone	26
Using the time alignment	27
Using the auto-equalizer	28
Auto TA and EQ (auto-time alignment and auto-equalizing)	28
Using the equalizer	30

#### ⑧ Initial Settings

Adjusting initial settings	33
Setting the clock	33
Switching the dimmer setting	33
Adjusting the brightness	34
Correcting distorted sound	34

# Contents

Switching the telephone muting/ attenuation	<b>34</b>
Switching the auxiliary setting	<b>34</b>
Switching the digital source setting	<b>35</b>
Switching the analog input setting	<b>35</b>
Resetting the audio functions	<b>35</b>

## 09 Other Functions

Turning the clock display on or off	<b>36</b>
Using different entertainment displays	<b>36</b>
Setting the digital source title	<b>36</b>
Setting the analog source title	<b>36</b>
Using the AUX source	<b>36</b>
Setting remote control code type	<b>37</b>
Title input	<b>37</b>
Using the PGM button	<b>38</b>

## ● Additional Information

Troubleshooting	<b>39</b>
Error messages	<b>39</b>
Understanding auto TA and EQ error messages	<b>40</b>
Specifications	<b>41</b>

## About this manual

This unit features a number of sophisticated functions ensuring superior reception and operation. All the functions have been designed for the easiest possible use, but many are not self-explanatory. This operation manual will help you benefit fully from this unit's potential and to maximize your listening enjoyment. We recommend that you familiarize yourself with the functions and their operation by reading through the manual before you begin using this unit. It is especially important that you read and observe precautions noted on the next page and in other sections. □

manual may not be available. In this case, refer to multi-channel processor's operation manual for concerning operation. □

## About digital and analog source

This unit features two digital sources and six analog sources.

By connecting a Pioneer DVD player to this unit with IP-BUS cable, you can use it as the digital source.

and are automatically occupied by the Pioneer DVD player when it is connected to this unit only via the optical cable. And each digital source is assigned according to the media which is playing on Pioneer DVD player, such as DVD, Video CD and CD. Devices which are connected to this unit with speaker input connector or RCA input connector can be used as analog sources. For example, when Pioneer head unit with tuner and cassette player is connected to this unit, you can use for tuner and for cassette player as independent source. Furthermore, audio function of DEQ-P7650 can be used independently for each analog source, if each analog source is used properly. The title displayed for digital sources and analog sources can be changed. This is useful when you use such sources. To input the titles, refer to *Title input* on page 37.



### Notes

- If equipment which is connected to this unit as analog source has multiple sources, be sure to change sources both for this unit and the connected equipment. Also, this unit cannot control equipment which is connected as analog source.
- When the volume level of the equipment which is connected to this unit as analog

## About this unit

This unit can control separately sold Pioneer multi-channel processor (e.g. DEQ-P7650). Also, supplied remote control can control the functions of separately sold Pioneer DVD player (e.g. XDV-P9), Pioneer multi-CD player, Pioneer television and the part of functions of Pioneer head units.

Also, this unit has universal connector for your car-stereo or other equipment, allowing you to connect to this unit and to enjoy the high quality sound of DEQ-P7650. If you want to connect them, use either the speaker input connector or the RCA input connector. You can connect six sources at a time for speaker input connector and RCA input connector as analog source. You can change the setting of each analog source between speaker input or RCA input. (Refer to *Switching the analog input setting* on page 35.)

### Note

Instructions in this operation manual use DEQ-P7650 as an example multi-channel processor. If multi-channel processor other than DEQ-P7650 is connected to this unit, some functions in this

source is too high, sound may be produced incorrectly. Also, sound controls (e.g. loudness, equalizer and so on) should be off to prevent incorrect sound. □

## Precautions

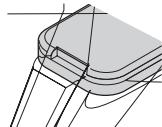
- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough so that you can hear sounds from outside the vehicle.
- Protect this unit from moisture.
- If the battery is disconnected or discharged, the preset memory will be erased and must be reprogrammed.
- Should this product fail to operate properly, contact your dealer or nearest authorized Pioneer Service Station. □

## Use and care of the remote control

### Installing the battery

Slide the tray out on the back of the remote control and insert the battery with the plus (+) and minus (-) poles pointing in the proper direction.

- When using for the first time, pull out the film protruding from the tray.



## Using the remote control operation mode switch

There are three remote control operation modes on the remote control. In order to control every function of connected equipment properly, be sure to change settings as follows:

- **Pioneer** mode – This mode can control Pioneer DVD player. Every function of Pioneer DVD player can be controlled by this remote control. Although some operations may differ slightly from your DVD player's remote control, use corresponding buttons to control them properly.
- **DEQ** mode – This mode controls Pioneer multi-channel processor (DEQ-P7650). Every function of DEQ-P7650 can be controlled by this remote control. Also, some functions for connected sources can be controlled. If Pioneer multi-CD player or television is connected to this unit, you can control their functions by using supplied remote control.
- **Head unit** mode – This mode can control Pioneer head unit. Although not every function of Pioneer head unit can be controlled by this remote control, most of the basic functions can be controlled. If you connect Pioneer head unit to this unit, supplied remote control can operate it.

### Note

Supplied remote control cannot control equipment connected to speaker input connector and RCA input connector. To control them, use the appropriate buttons on the equipment. 

## Reverse mode

If you do not perform an operation within about 30 seconds, screen indications start to

reverse, and then continue reversing every 10 seconds. Pressing button  when power to this unit is turned off while the ignition switch is set to ACC or ON cancels the reverse mode. Press button  again to start the reverse mode. 

## Dolby Digital/DTS compatibility

When using this unit with a Pioneer multi-channel processor, you can enjoy the atmosphere and excitement provided by DVD movie and music software featuring 5.1 channel recordings.

- Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.



- "DTS" is a registered trademark of Digital Theater Systems, Inc.



### Note

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited. 

## **Display unit**

①

[3]

- mode – Press to return to the top menu during DVD playback.
- mode – Press to select the video source when you connect a Pioneer television to this unit.
- mode – Press to select the video source when you connect a Pioneer television to this unit.

[4]

This is effective only when controlling Pioneer DVD player.

Press to display the DVD menu during DVD playback.

[5]

This is effective only when controlling Pioneer DVD player.

Press to return to the previous display when the

is displayed.

[6]

This is effective only when controlling Pioneer DVD player.

Press to change the audio language during DVD playback.

[7]

- mode – Press to change the information display on the separately sold display while the DVD player is playing as the source.
- mode – Press to display information on the information display.
- mode – Press to display information on the head unit display.

[8]

This is effective only when controlling Pioneer DVD player.

Press to change the subtitle language during DVD playback.

[9]

This is effective only when controlling Pioneer DVD player.

Press to change the viewing angle during DVD playback.

[10]

- mode – Press to switch sequentially between play and pause.
- mode – Not used.
- mode – Not used.

[11]

- mode – Press to perform fast reverse.
- mode – Press to control functions.
- mode – Press to control functions.

[12]

- mode – Press to return to the previous track (chapter).
- mode – Press to select functions.
- mode – Press to select functions.

[13]

- mode – Press to directly select the desired track, chapter and disc.
- mode
  - buttons – Press to operate disc number search for the multi-CD player when you connect a Pioneer multi-CD player to this unit.

button – Press to select a source when controlling Pioneer head unit.

button – Press to change the information display to the clock display .

- mode

- buttons – Not used.

button – Press to select a source when controlling Pioneer head unit.

button – Press to change the information display to the clock display .

[14]

Press to change to the entertainment display.

## What's What

15

This unit is turned on by selecting a source. Press to cycle through all the available sources.

16

This is effective only when controlling Pioneer DVD player.

- mode – Move to select the setting. Click to set the setting or select on or off.
- mode – Move to select the setting. Click to set the setting or select on or off.
- mode – Not used.

17

Press to select various equalizer curves.

18

Press to select a sound field control.

19

Switches the operation mode between mode, mode and mode. (Refer to *Using the remote control operation mode switch* on page 6.)

20

- mode – Not used.
- mode – Press to cancel the control mode of functions.
- mode – Press to cancel the control mode of functions.

21

- mode – When a Pioneer DVD player which features Bookmark function (refer to *Resume playback (Bookmark)* on page 11) is connected to this unit, press to turn Bookmark function on or off.
- mode – Press to operate the pre-programmed functions for each source when controlling Pioneer head unit. (Refer to *Using the PGM button* on page 38.)
- mode – Press to operate the pre-programmed functions for each source when controlling Pioneer head unit.

(Refer to *Using the PGM button* on page 38.)

22



- mode – Press to move ahead one frame at a time during DVD/Video CD playback. Press and hold for one second to activate slow playback.
- mode – Press to control functions.
- mode – Press to control functions.

23

Press to quickly lower the volume level, by about 90%. Press once more to return to the original volume level.

24



- mode – Press to perform fast forward.
- mode – Press to control functions.
- mode – Press to control functions.

25



- mode – Press to stop playback.
- mode – Not used.
- mode – Not used.

26



- mode – Press to skip to the next track (chapter).
- mode – Press to select various sound quality controls.
- mode – Press to select various sound quality controls.

27



- mode – Press to cancel the input number while are used.
- mode – Not used.
- mode – Not used.

### Turning the unit on

- When you select a source the unit is turned on. 

### Selecting a source

- Press repeatedly to switch between the following sources:  
**Digital source 1—Digital source 2—Television—DVD player/multi-DVD player—Multi-CD player—External unit 1—External unit 2—AUX—Analog source 1—Analog source 2—Analog source 3—Analog source 4—Analog source 5—Analog source 6**

#### Notes

- DVD source (**DVD player/multi-DVD player**) and Digital sources (**Digital source 1 and 2**) can exist simultaneously. However, DVD player which is connected to the multi-channel processor (DEQ-P7650) via the IP-BUS and optical cable should be connected to **OPT IN. 1** connector. Also, equipment which is connected to the multi-channel processor only via the optical cable should be connected to **OPT IN. 2** connector. If not, this may not operate properly.
- When no source is connected, short beep will sound when you try to select a source.
- In the following cases, the sound source will not change:
  - When there is no unit corresponding to the selected source connected to this unit.
  - When there is no magazine in the multi-CD player.
  - When there is no magazine in the multi-DVD player.
  - When there is no disc in the DVD player.

- When the AUX (auxiliary input) is set to off (refer to page 34).
- When the analog sources are set to off (refer to page 35).
- External unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by this unit. Two external units can be controlled by this unit. When two external units are connected, the allocation of them to external unit 1 or external unit 2 is automatically set by this unit. 

### Adjusting the volume

- Press to increase or decrease the volume. 

### Turning the unit off

- 

## DVD Player

You can use this unit with a separately sold DVD player or multi-DVD player.

For details concerning operation, refer to the DVD player's or multi-DVD player's operation manual. This section provides information on DVD operations with this unit which differs from that described in the DVD player's or multi-DVD player's operation manual.

### Important

You can use the following functions only when the remote control is set to mode.

## Function menu switching

- 

Press  repeatedly to switch between the following functions:

(repeat play)— (pause)

- 

Press  repeatedly to switch between the following functions:

(repeat play)— (pause)

- 

Press  repeatedly to switch between the following functions:

(repeat play)— (random play)  
— (scan play)— (pause) 

## Repeating play

- 
- During DVD playback, press  or  to select the repeat range.

- During Video CD or CD playback, press  or  to turn repeat play on or off. 

## Playing tracks in a random order



- Press  to turn random play off. 

## Scanning tracks of a CD



- When you find the desired track press  to turn scan play off.
- If the display has automatically returned to the playback display, select again by pressing . 

## Pausing playback



- Press  to turn pause off. 

## Resume playback (Bookmark)

### Important

You can use this function only when the remote control is set to mode.

The Bookmark function lets you resume playback from a selected scene the next time the disc is loaded.

- This function can be operated only when the DVD disc is playing on the Pioneer DVD player which features Bookmark function.

●

The selected scene will be bookmarked so that playback resumes from that point next time.

You can bookmark up to five discs. After that, the oldest bookmark is replaced by the new one.

- To clear the bookmark on a disc, press and hold during playback. □

## TV tuner

You can use this unit with a separately sold TV tuner.

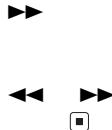
For details concerning operation, refer to the TV tuner's operation manuals. This section provides information on TV operations with this unit which differs from that described in the TV tuner's operation manual.



### Important

You can use the following functions only when the remote control is set to **TV** mode.

## Using the TV tuner



## Storing and recalling broadcast stations



The number you have pressed will flash in the preset number indicator and then remain lit. The selected station has been stored in memory.

The next time you press the same preset tuning button the station is recalled from memory.



### Notes

- Up to 12 stations, six for each of two TV bands can be stored in memory.
- You can also recall station assigned to preset tuning buttons – by pressing **◀◀** or **▶▶**.

## Storing the strongest broadcast stations sequentially



Press **◀◀** until **■■■** appears in the display.



**■■■** begins to flash. While **■■■** is flashing the 12 strongest broadcast stations will be stored in order from the lowest channel up. When finished, **■■■** stops flashing.

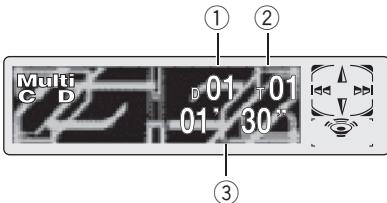
- To cancel the storage process, press **◀◀**.



### Note

Storing broadcast frequencies with BSSM may replace broadcast frequencies you have saved using – **□**.

## Playing a CD



You can use this unit to control a multi-CD player, which is sold separately.

These are the basic steps necessary to play a CD with your multi-CD player. More advanced CD operation is explained starting on the next page.

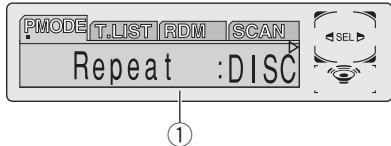


### Important

o thef5Pli5Pwting0X,,QL5funcatioWs0XGM6LM5olys0XG,675whend0úozjXQjMzQ9j4o5the0XG9QL5reamPth

## Multi-CD Player

### Introduction of advanced multi-CD player operation



①

Shows the function status.



#### Important

You can use the following functions only when the remote control is set to mode.

●     

Press repeatedly to switch between the following functions:

- (repeat play)—Disc title list—
- (random play)—(scan play)—
- (ITS play)—(pause)—(compression and DBE)

■ To return to the playback display, press .



#### Note

If you do not operate the function within about 30 seconds, the display is automatically returned to the playback display.

### Repeating play

There are three repeat play ranges for the multi-CD player: (multi-CD player repeat), (one-track repeat) and (disc repeat).



Press until appears in the display.



Press or until the desired repeat range appears in the display.

- — Repeat all discs in the multi-CD player
- — Repeat just the current track
- — Repeat the current disc



#### Notes

- If you select other discs during repeat play, the repeat play range changes to .
- If you perform track search or fast forward/reverse during , the repeat play range changes to .

### Playing tracks in a random order

Random play lets you play back tracks in a random order within the repeat range, and .

Refer to *Repeating play* on this page.



Press until appears in the display.



appears in the display. Tracks will play in a random order within the previously selected or ranges.



appears in the display. Tracks will continue to play in order.



If you turn random play on during return to the playback display, appears in the display. □

## Scanning CDs and tracks

While you are using , the beginning of each track on the selected disc plays for about 10 seconds. When you are using , the beginning of the first track of each disc is played for about 10 seconds.

Refer to *Repeating play* on the previous page.



Press **◀◀** until appears in the display.



appears in the display. The first 10 seconds of each track of the current disc (or the first track of each disc) is played.



appears in the display. The track (or disc) will continue to play.

- If the display has automatically returned to the playback display, select again by pressing **◀◀**.



- After track or disc scanning is finished, normal playback of the tracks will begin again.
- If you turn scan play on during and then return to the playback display, appears in the display. □

## Pausing CD playback

Pause lets you temporarily stop disc playback.



Press **◀◀** until appears in the display.



appears in the display. Play of the current track pauses.



appears in the display. Play will resume at the same point that you turned pause on. □

## Using ITS playlists

ITS (instant track selection) lets you make a playlist of favorite tracks from those in the multi-CD player magazine. After you have added your favorite tracks to the playlist you can turn on ITS play and play just those selections.

## Creating a playlist with ITS programming

You can use ITS to enter and play back up to 99 tracks per disc, up to 100 discs (with the disc titles). (With multi-CD players sold before the CDX-P1250 and CDX-P650, up to 24 tracks can be stored in the playlist.)

Press **◀▶** or **▶▶** to select a CD.



After is displayed, press **◀◀** repeatedly, the following functions appear in the display:  
 (disc title input)— (ITS programming)

## Multi-CD Player



is displayed briefly and the currently playing selection is added to your playlist. The display then shows again.

### Note

After data for 100 discs has been stored in memory, data for a new disc will overwrite the oldest one.

## Playback from your ITS playlist

ITS play lets you listen to the tracks that you have entered into your ITS playlist. When you turn on ITS play, tracks from your ITS playlist in the multi-CD player will begin to play.

Refer to *Repeating play* on page 15.



Press until appears in the display.



appears in the display. Playback begins of those tracks from your playlist within the previously selected or ranges.

- If no tracks in the current range are programmed for ITS play then is displayed.



appears in the display. Playback will continue in normal order from the currently playing track and CD.

## Erasing a track from your ITS playlist

To delete a track from your ITS playlist, make sure ITS play is on.

If ITS play is already on, skip to step 2.

Refer to *Playback from your ITS playlist* on this page.



After is displayed, press until appears in the display.



The currently playing selection is erased from your ITS playlist and playback of the next track from your ITS playlist begins.

- If there are no tracks from your playlist in the current range, is displayed and normal play resumes.

## Erasing a CD from your ITS playlist

To delete all tracks of a CD from your ITS playlist, make sure ITS play is off.

Press or to select a CD.



After is displayed, press until appears in the display.



All tracks on the currently playing CD are erased from your playlist and [ ] is displayed.



## Using disc title functions

You can input CD titles and display the titles. Then you can easily search for and play a desired disc.

### Entering disc titles

Use the disc title input feature to store up to 100 CD titles (with ITS playlist) into the multi-CD player. Each title can be up to 10 characters long.

Press **◀II** or **II▶** to select a CD.

To input the titles, refer to *Title input* on page 37.

### Notes

- Titles remain in memory, even after the disc has been removed from the magazine, and are recalled when the disc is reinserted.
- After data for 100 discs has been stored in memory, data for a new disc will overwrite the oldest one.
- When playing a CD TEXT disc on a CD TEXT compatible multi-CD player, you cannot switch to [ ]. The disc title will have already been recorded on a CD TEXT disc.

### Displaying disc titles

You can display the title of any disc that has had a disc title entered.



Press [ ] repeatedly to switch between the following settings:

Play time— [ ] (disc title)

When you select [ ], the title of the currently playing disc is shown in the display.

- If no title has been entered for the currently playing disc, [ ] is displayed.

### Selecting discs from the disc title list

Disc title list lets you see the list of disc titles that have been entered into the multi-CD player and lets you select one for playback.



Press **I◀◀** until [ ] appears in the display.



- If no title has been entered for a disc, title is not displayed.



That selection will begin to play. [ ]

## Using CD TEXT functions

*You can use these functions only with a CD TEXT compatible multi-CD player.*

Some discs have certain information encoded on the disc during manufacture. These discs may contain such information as the CD title, track title, artist's name and playback time and are called CD TEXT discs. Only these specially encoded CD TEXT discs support the functions listed below.

## Multi-CD Player

### Displaying titles on CD TEXT discs



Press repeatedly to switch between the following settings:

Play time— (disc title)  
— (disc artist name)  
— (track title)—  
(track artist name)

■ If specific information has not been recorded on a CD TEXT disc, will be displayed (e.g., ).



Press until appears in the display.

■ If the multi-CD player does not support COMP/DBE, is displayed when you attempt to select it.



Press or repeatedly to switch between the following settings:



### Scrolling titles in the display

This unit can display the first 16 letters only of , , and .

When the recorded information is longer than 16 letters, you can scroll the text to the left so that the rest of the title can be seen.



The rest of the title will appear in the display.

### Using compression and bass emphasis

*You can use these functions only with a multi-CD player that supports them.*

Using COMP (compression) and DBE (dynamic bass emphasis) functions lets you adjust the sound playback quality of the multi-CD player. Each of the functions has a two-step adjustment. The COMP function balances the output of louder and softer sounds at higher volumes. DBE boosts bass levels to give playback a fuller sound. Listen to each of the effects as you select them and use the one that best enhances the playback of the track or CD that you are listening to.

## Introduction of DSP adjustments

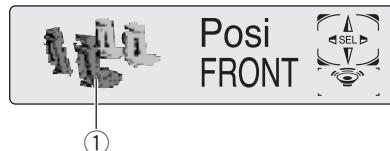
### Important

- You can use the following functions only when the remote control is set to **mode**.
- Following functions are effective only when you connected a Pioneer multi-channel processor (DEQ-P7650) to this unit.

By carrying out the following settings/adjustments in the order shown, you can create a finely-tuned sound field effortlessly.

- 1 *Setting the speaker setting*
- 2 *Using the position selector*
- 3 *Auto TA and EQ (auto-time alignment and auto-equalizing)*
- 4 *Adjusting the time alignment*
- 5 *Adjusting the speaker output levels using a test tone*
- 6 *Selecting a cross-over frequency*
- 7 *Adjusting the speaker output levels*
- 8 *Adjusting 3-band parametric equalizer*

## Operating the DSP menu



①

Shows the DSP status.

● ►►|

Press ►►| repeatedly to switch between the following DSP functions:

(position selector)— (balance adjustment)— (source level adjustment)— (dynamic range control)— (direct) — II (Dolby Pro Logic II)— (down mix)

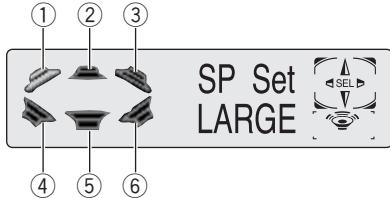
- To return to the display of each source, press .

### Notes

- If you do not operate the DSP function within about 30 seconds, the display is automatically returned to the source display.
- If both the center and the rear speakers are set to **in** in the DSP details menu (refer to *Setting the speaker setting* on page 24), you cannot use II.

## Digital Signal Processor

### Operating the DSP details menu



- ①
- ②
- ③
- ④
- ⑤
- ⑥
- ►►|      ►►|

After [ ] is displayed, press ►►| repeatedly, the following DSP functions appear in the display:

(speaker setting)— (cross-over frequency)— (speaker output level)  
 — (test tone)— (time alignment mode)— (time alignment adjustment)— (auto-equalizer on/off)  
 — (3-band parametric equalizer)

- When neither [ ] nor [ ] is selected in [ ], you cannot switch to [ ].
- When neither [ ] nor [ ] is selected as an equalizer curve, you cannot switch to [ ].
- To return to the display of each source, press [ ]

### Using the sound field control

The SFC function creates the sensation of a live performance.

- The acoustics of different performance environments are not the same and depend on the extent and contour of space through which sound waves move and on how sounds bounce off the stage, walls, floors and ceilings. At a live performance you hear music in three stages: direct sound, early reflections, and late reflections, or reverberations. Those factors are programmed into the SFC circuitry to recreate the acoustics of various performance settings.



Press [ ] repeatedly to switch between the following mode:

(musical)—	(drama)—
(action)—	(jazz)—
— (off)	(hall)—
	(club)

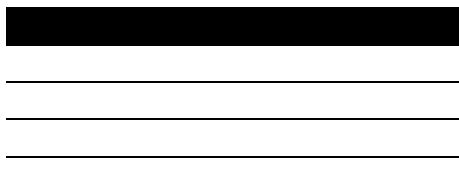


#### Note

If the source is a 2-channel LPCM audio or a 2-channel Dolby Digital audio and you select SFC effects that are most applicable for 5.1-channel audio (i.e., [ ], [ ], or [ ]), we recommend turning Dolby Pro Logic II on. On the other hand, when selecting SFC effects that are intended for use with 2-channel audio (i.e., [ ], or [ ]), we recommend turning Dolby Pro Logic II off. [ ]

## **Using the position selector**

One way to assure a more natural sound is to accurately position the stereo image, putting you right in the center of the sound field. The position selector function lets you automatically adjust the speaker output levels and inserts a delay time to match the number and



## Digital Signal Processor



Each press of **◀◀** or **▶▶** increases or decreases the source volume.

— — is displayed as the source volume is increased or decreased.



### Notes

- DVD, Video CD, CD and MP3/WMA are set to the same source level adjustment volume automatically.
- — and — are set to the same source level adjustment volume automatically.



Press **▶▶** until **II** appears in the display.



**II** appears in the display. Direct control is now on.

- To turn direct control off, press **◀◀**.



### Notes

- All audio functions are locked out during **II** except — and **II**.
- If the source is a 2-channel LPCM audio or a 2-channel Dolby Digital audio and you select **II**, audio is heard only over front left/right speakers.

## Using the dynamic range control

The dynamic range refers to the difference between the largest and softest sounds. The dynamic range control compresses this difference so that you can clearly hear sounds even at low volume levels.

- The dynamic range control is effective only on Dolby Digital sounds.



Press **▶▶** until **II** appears in the display.



**II** appears in the display. Dynamic range control is now on.

- To turn dynamic range control off, press **◀◀**.



Press **▶▶** until **II**

appears in the display.



**II** appears in the display.



## Using the direct control

You can override audio settings to check for effectiveness of your audio settings.

## Adjusting the Music mode

You can adjust the Music mode with the following three controls.

- Panorama ( ) extends the front stereo image to include the surround speakers for an exciting "wraparound" effect.
- Dimension ( ) allows you to gradually adjust the sound field either towards the front or the rear.
- Center Width Control ( ) allows center-channel sounds to be positioned between the center speaker and the left/right speakers. It improves the left-center-right stage presentation for both the driver and the front passenger.



Each time you press **◀|||** or **|||▶** it moves the sound towards the front or the surrounds.

-- is displayed as the front/surround speaker balance moves from front to surrounds.



Each time you press **◀|||** or **|||▶** it gradually spreads the center channel sound into the front left and right speakers over a range -- .

is the default and it's recommended for most recordings. places all center sound in the center speaker. places all center sound equally in the left/right speakers. □

## Using the down-mix function

The down-mix function allows you to play back multi-channel audio in 2 channels.



Press **|||▶** until appears in the display.



- – Down mix so that the surround components can be restored (decoded).
- – Stereo mix the original audio that do not contain channel modes such as surround components. □

## Setting the speaker setting

You need to make with/without (or yes/no) and size (bass reproducing capacity) selection/adjustments depending on the installed speakers. The size needs to be set to (large) if the speaker is capable of reproducing sounds of about 100 Hz or below. Otherwise select (small).

- Low frequency range is not output if the subwoofer is set to and the front and rear speakers set to or .
- It is imperative that non-installed speakers be set to .
- Set the front or rear speaker to if the speaker is capable of reproducing bass content, or if no subwoofer is installed.

## Digital Signal Processor



Each press of **◀◀** or **▶▶** selects the speaker in the following order:

Front speakers—Center speaker—Rear speakers—Subwoofer— (subwoofer setting)  
 □ You can switch to only when the subwoofer has been set to .



Each press of **◀◀** or **▶▶** selects the size in the following order:

- (large)— (small)— (off)
- You cannot select , when the front speakers have been selected.
- You can turn or , when the subwoofer has been selected.
- You can switch (reverse phase) or (normal phase), when (subwoofer setting) has been selected.

### Correcting the subwoofer's phase

If trying to boost the bass output of the subwoofer doesn't do much or rather makes you feel that the bass gets more murky, this may indicate that the subwoofer's output and bass content you hear over other speakers cancel each other out. To remove this problem, try changing the phase setting for the subwoofer.



Each press of **◀◀** or **▶▶** selects the speaker in the following order:

Front speakers—Center speaker—Rear speakers—Subwoofer— (subwoofer setting)



Press **▶▶** to select (normal phase).  
 Press **◀◀** to select (reverse phase).

### Note

When playing a 2-channel mono source with Pro Logic II turned on, there may be occasions when the following will occur:

- No audio is outputted if the center speaker setting is or and no center speaker is installed.
- Audio is heard only over the center speaker if installed and the center speaker setting is or .

### Selecting a cross-over frequency

You can select a frequency, under which sounds are reproduced through the subwoofer. If the installed speakers include one whose size has been set to , you can select a frequency, under which sounds are reproduced through a speaker or subwoofer.



After **is displayed**, press **▶▶|** until **appears in the display.**



Each press of **◀◀** or **▶▶** selects the speaker in the following order:  
Front speakers—Center speaker—Rear speakers—Subwoofer



Each press of **◀||** or **||▶** selects cross-over frequencies in the following order:

— — — — — (Hz)



Selecting a cross-over frequency is to set a cross-over frequency of the subwoofer's L.P.F. (low-pass filter) and that of the **speaker** H.P.F. (high-pass filter). The cross-over frequency setting has no effect if the subwoofer is set to **and other speakers are set to** **or**.

## Adjusting the speaker output levels

You can readjust the speaker output levels using a test tone while listening to music.



After **is displayed**, press **▶▶|** until **appears in the display.**



Each press of **◀◀** or **▶▶** selects the speaker in the following order:

Front speaker left—Center speaker—Front speaker right—Rear speaker right—Rear speaker left—Subwoofer

- You cannot select speakers whose size is set at **.**



Each press of **◀||** or **||▶** increases or decreases the speaker output level. **--** is displayed as the level is increased or decreased.



To adjust the speaker output levels in this mode is the same as making the speaker output levels at **. Both provide the same results.**

## Adjusting the speaker output levels using a test tone

A convenient test tone allows you to easily get the overall balance right among the speakers.



After **is displayed**, press **▶▶|** until **appears in the display.**



The test tone is outputted. It rotates from speaker to speaker in the following sequence at intervals of about two seconds. The current

## Digital Signal Processor

settings for the speaker over which you hear the test tone are shown in the display.

Front speaker left—Center speaker—Front speaker right—Rear speaker right—Rear speaker left—Subwoofer

- Check each speaker output level. If no adjustments are needed, perform step 4 to stop the test tone.
- The settings do not appear for speakers whose size is set .



Each press of **◀||** or **||▶** increases or decreases the speaker output level. —— is displayed as the level is increased or decreased.

- The test tone rotates to the next speaker after about two seconds from the last operation.



- — Initial time alignment (factory setting)
- — Adjusted time alignment that you can create for yourself
- — Time alignment created by auto TA and EQ. (Refer to *Auto TA and EQ (auto-time alignment and auto-equalizing)* on the next page.)
- — Turn the time alignment off
- To turn time alignment off, select .
- You cannot select if auto TA and EQ has not been carried out.
- You cannot select when neither nor is selected in .

### Notes

- If needed, select speakers and adjust their 'absolute' output levels. (Refer to *Adjusting the speaker output levels* on the previous page.)
- To adjust the speaker output levels in this mode is the same as making the speaker output levels at . Both provide the same results.□

## Using the time alignment

The time alignment lets you adjust the distance between each speaker and the listening position.

### Adjusting the time alignment

By adjusting the distance between each speaker and a selected listening position, you can insert delay times into the speaker output to obtain a correct sound image and overall level balance. Although this is automatically achieved when you set the listening position, the time alignment feature provides a fine adjustment.



After —— is displayed, press **▶▶|** until —— appears in the display.

- You cannot select when neither nor is selected in .

# Digital Signal Processor



Each press of **<<** or **>>** selects the speaker in the following order:

Front speaker left—Center speaker—Front speaker right—Rear speaker right—Rear speaker left—Subwoofer

- You cannot select speakers whose size is set at .



Each press of **<<II** or **II>** increases or decreases the distance. — is displayed as the distance is increased or decreased.



## Using the auto-equalizer

The auto-equalizer is the equalizer curve created by auto TA and EQ (refer to *Auto TA and EQ (auto-time alignment and auto-equalizing)* on this page).

You can turn the auto-equalizer on or off.



- You cannot use this function if auto TA and EQ has not been carried out.

**II>** appears in the display.  
■ To turn auto-equalizer off, press **<<II**. **□**

## Auto TA and EQ (auto-time alignment and auto-equalizing)

*Only when the multi-channel processor (e.g., DEQ-P7650) is connected to this unit, you can operate this function.*

The auto-time alignment is automatically adjusted for the distance between each speaker and the listening position.

The auto-equalizer automatically measures the car interior acoustic characteristics, and then creates the auto-equalizer curve based on that information.

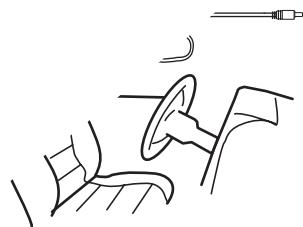
### WARNING

To prevent accidents, never carry out auto TA and EQ while driving. When this function measures the car interior acoustic characteristics to create an auto-equalizer curve, a loud measurement tone (noise) may be outputted from the speakers.

### CAUTION

- Carrying out auto TA and EQ under the following conditions may damage the speakers. Be sure to check the conditions thoroughly before carrying out auto TA and EQ.
  - When speakers are incorrectly connected. (e.g., When a rear speaker is connected to a subwoofer output.)
  - When a speaker is connected to a power amp delivering output higher than the speaker's maximum input power capability.
- If the microphone is placed in an unsuitable position the measurement tone may become loud and measurement may take a long time, resulting in a drain on battery power. Be sure to place the microphone in the specified location.

iger



If the car's air conditioner or heater is turned on, turn it off. Noise from the fan in the air conditioner or heater may prevent correct auto TA and EQ.

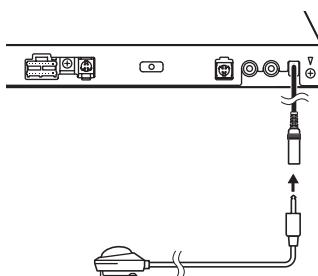
- Press  to turn the source on if this unit is turned off.

Refer to *Using the position selector* on page 22.

- If no position is selected before you start auto TA and EQ,  is selected automatically.

- When all speakers are connected, auto TA and EQ is completed in about six minutes.
- To stop auto TA and EQ, press any keys.
- To cancel auto TA and EQ part way through, press .

When correct measurement of car interior acoustic characteristics is not possible, an error message is displayed. (Refer to *Understanding auto TA and EQ error messages* on page 40.)



The measurement tone (noise) is outputted from the speakers, and auto TA and EQ begins.

Store the microphone carefully in the glove compartment or any other safe place. If the microphone is subjected to direct sunlight for an extended period, high temperatures may cause distortion, color change or malfunction. 

## Using the equalizer

The equalizer lets you adjust the equalization to match car interior acoustic characteristics as desired.

## Recalling equalizer curves

There are seven stored equalizer curves which you can easily recall at any time. Here is a list of the equalizer curves:

Display	Equalizer curve
	Super bass
	Powerful
	Natural

# Digital Signal Processor

Display	Equalizer curve
Vocal	
Flat	
Custom 1	
Custom 2	

- and are adjusted equalizer curves.
- When is selected no supplement or correction is made to the sound. This is useful to check the effect of the equalizer curves by switching alternatively between and a set equalizer curve.
- Press repeatedly to switch between the following equalizers:

— — — —  
— — — —

## Adjusting 3-band parametric equalizer

For and equalizer curves, you can adjust the front, rear and center equalizer curves separately by selecting a center frequency, an equalizer level and a Q factor for each band.

- A separate curve can be created for each source.
- A curve can be created common to all sources.
- The center speaker largely determines the sound image and getting the balance right isn't easy. We recommend reproducing a 2-ch. audio (a CD for example) and getting the balance right among the speakers except for the center, and then reproducing a 5.1-ch. audio (Dolby Digital or DTS) and adjusting the center speaker output to the balance you have already got among the other speakers.



After is displayed, press until appears in the display.



Each press of or selects the item in the following order:

(speakers)— (bands)— (center frequency)— (equalizer level)— (Q factor)



Each press of or selects the speaker in the following order:

(front speakers)— (center speaker)— (rear speakers)

- You cannot select speakers whose size is set at .



Each press of or selects equalizer bands in the following order:

(low)— (mid)— (high)



Each press of or selects the frequency in the following order:

**40Hz—50Hz—63Hz—80Hz—100Hz—125Hz—160Hz—200Hz—250Hz—315Hz—400Hz—500Hz—630Hz—800Hz—1kHz—1.25kHz—1.6kHz—2kHz—2.5kHz—3.15kHz—4kHz—5kHz—6.3kHz—8kHz—10kHz—12.5kHz**



Each press of or increases or decreases the equalizer level. is displayed as the level is increased or decreased.



Each press **◀||** or **||▶** switches between the following Q factor:

(wide)— (narrow)

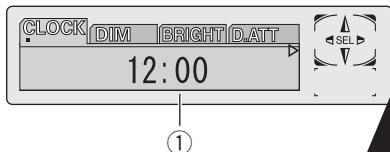
- You can adjust parameters for each band of the other speakers in the same way.

**Note**

You can select a center frequency from among 26 frequencies for each band. You can change the center frequency in 1/3-octave steps, but you cannot select frequencies that have intervals shorter than 1 octave among the center frequencies of the three bands.

## Initial Settings

### Adjusting initial settings



Initial settings lets you perform initial different settings for this unit.



#### Important

You can use the following functions only when the remote control is set to mode.

- To start initial settings, press **INITIAL SETTING**.
- You can also cancel initial setting down **◀▶** until the unit turns off.

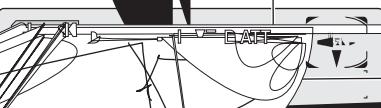
### Setting the clock

These instructions show how to set the clock.

Press **INITIAL SETTING** until clock appears in the display.

Press **◀▶** to select the segment you want to change.

Pressing **◀▶** will select one segment of the clock display. Hour—Minute—Second. As you select segments of the clock display the segment selected will blink.



## Adjusting the brightness

You can adjust the display brightness. Initially this mode is set to 12.



Press **◀◀** repeatedly until appears in the display.



Each press of **◀◀** or **▶▶** increases or decreases the brightness level. – is displayed as the level is increased or decreased.

## Correcting distorted sound

You can minimize distortion that may be caused by the equalizer curve settings.

- Setting an equalizer level high can cause distortion. If high sound is crippled or distorted, try switching to . Normally, leave the setting at to ensure quality sound.



Press **◀◀** repeatedly until appears in the display.



Pressing **◀◀** or **▶▶** will switch between (high) and (low) and that status will be displayed.

## Switching the telephone muting/attenuation

Sound from this system is muted or attenuated automatically when a call is made or re-

ceived using a cellular telephone connected to this unit.



Press **◀◀** repeatedly until appears in the display.



Press **◀◀** or **▶▶** until the desired setting appears in the display.

- Muting
- Attenuation
- ( than ) has a stronger effect
- Attenuation

### Notes

- The sound is turned off, or is displayed and no audio adjustment is possible.
- Operation returns to normal when the phone connection is ended.

## Switching the auxiliary setting

It is possible to use auxiliary equipment with this unit. Activate the auxiliary setting when using auxiliary equipment connected to this unit.



Press **◀◀** repeatedly until appears in the display.



appears in the display.

- To turn auxiliary setting off, press **◀◀**.

## Initial Settings

### Switching the digital source setting

It is possible to connect DVD player to this unit. Activate the digital source when using DVD player connected to this unit.

Initially, both and are set to off.



Press until (e.g., ) appears in the display.



- To turn digital setting off, press .

### Switching the analog input setting

It is possible to connect various equipment to this unit's speaker input or RCA input. Activate the analog setting when using such equipment connected to this unit, and select the input according to the connecting method.



Press until (e.g., ) appears in the display.



Connection method (e.g., ) appears in the display.



Pressing or will switch between and and that status will be displayed.

- To turn analog input setting off, press .

### Resetting the audio functions

You can reset all audio functions except volume.

Press repeatedly until appears in the display.



appears in the display.

- To cancel resetting the audio functions, press .



appears in the display.



appears in the display.

## Turning the clock display on or off



You can turn the clock display on or off.

- 

Each press of turns the clock display on or off.

- The clock display disappears temporarily when you perform other operations, but the clock display appears again after 25 seconds.

### Note

Even when the sources are off, the clock display appears on the display. Pressing turns the clock display on or off.

## Using different entertainment displays

You can enjoy entertainment displays while listening to each sound source.

- These are different ways of displaying the spectrum and do not affect sound output.

- 

Each time you press the display changes in the following order:  
Source icon display—Background visual 1—Background visual 2—Background visual 3—Background visual 4—Movie screen 1—Movie screen 2—Entertainment clock—display off

## Setting the digital source title

The title displayed for the digital sources (e.g., ) can be changed.

To input the titles, refer to *Title input* on the next page.

## Setting the analog source title

The title displayed for the analog sources (e.g., ) can be changed.



To input the titles, refer to *Title input* on the next page.

## Using the AUX source

An IP-BUS-RCA Interconnector such as the CD-RB20/CD-RB10 (sold separately) lets you connect this unit to auxiliary equipment featuring RCA output. For more details, refer to the IP-BUS-RCA Interconnector owner's manual.

## Selecting AUX as the source

- 

Press until appears in the display.

- If the auxiliary setting is not turned on, cannot be selected. For more details, see *Switching the auxiliary setting* on page 34.

## Other Functions

### Setting the AUX title

The title displayed for the source can be changed.



To input the titles, refer to *Title input* on this page.



Press button repeatedly to switch between the following character types:

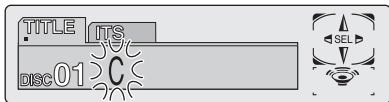
Alphabet (upper case), numbers and symbols  
—Alphabet (lower case)—European letters,  
such as those with accents (e.g. —)

Numbers and symbols

- You can select to input numbers and symbols by pressing button .



Each press of will display a letter of the alphabet in , numbers and symbols in order. Each press of will display a letter in the reverse order, such as order.



When the desired letter is displayed, press to move the cursor to the next position and then select the next letter. Press to move backwards in the display.



When you press one more time, the entered title is stored in memory.



### Title input

You can input titles for discs, digital sources, analog sources and AUX sources. Refer to the following procedure and input your desired titles.



#### Important

You can use this function only when the remote control is set to mode.

## Using the PGM button

You can operate the preprogrammed functions for each source by using when controlling Pioneer head unit.



- – Built-in DVD player
- – DVD player/multi-DVD player
- – Multi-CD player

■ To turn pause off, press again.



Press and hold until the BSM turns on.

■ To cancel the storage process, press again.



Press and hold until the BSSM turns on.

■ To cancel the storage process, press again.

## Additional Information

### Troubleshooting

#### Common

Symptom	Cause	Action (See)
Power doesn't turn on. The unit doesn't operate.	Leads and connectors are incorrectly connected.  The fuse is blown.	Confirm once more that all connections are correct.  Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install the correct fuse with the same rating.
	Noise and other factors are causing the built-in microprocessor to operate incorrectly.	Turn the unit off and then on.
Operation with the remote control isn't possible.	The remote control operation mode is incorrect.	Switch to the correct remote control mode. (Page 6)
The unit does not operate correctly even when the appropriate remote control buttons are pressed.	The remote control code is incorrect.	Make sure the remote control selection switch setting and code type setting are the same. (Page 37)
	Battery power is low.	Load new battery. (Page 5)
No sounds are heard. The volume level will not rise.	Cables are not connected correctly.	Connect the cables correctly.
There is no sound. Volume level is low.	The volume level is low.  The attenuator is on.	Adjust the volume level.  Turn the attenuator off.

### Error messages

When problems occur with disc playback, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest PIONEER Service Center.

#### Error messages

Message	Cause	Action (See)
	Dirty disc	Clean disc.
	Scratched disc	Replace disc.
	The temperature of this unit is outside the normal operating range	Wait until the unit's temperature returns to within normal operating limits.
	The disc does not have the same region number as this unit	Replace the DVD video with one bearing the correct region number.
	This type of disc cannot be played by this unit	Replace the disc with one this unit can play.
	The disc is loaded upside down	Check that the disc is loaded correctly.

## Additional Information

Message	Cause	Action (See)
	Electrical or mechanical	Turn the ignition ON and OFF, or switch to a different source, then back to the DVD player.



### Understanding auto TA and EQ error messages

When correct measurement of car interior acoustic characteristics is not possible using the auto TA and EQ, an error message may appear on the display. If an error message appears, refer to the table below to see what the problem is and the suggested method of correcting the problem. After checking, try again.

Message	Cause	Action
	Microphone is not connected.	Plug the supplied microphone securely into the jack.
, , , ,	The microphone cannot pick up the measuring tone of a speaker.	<ul style="list-style-type: none"> <li>• Confirm that the speakers are connected correctly.</li> <li>• Correct the input level setting of the power amp connected to the speakers.</li> <li>• Set the microphone correctly.</li> </ul>
	The surrounding noise level is too high.	<ul style="list-style-type: none"> <li>• Stop your car in a place that is as quiet as possible, and switch off the engine, air conditioner or heater.</li> <li>• Set the microphone correctly.</li> </ul>



## Additional Information

### Specifications

Rated power source .....	14.4 V DC
	(allowable voltage range: 12.0 – 14.4 V DC)
Grounding system .....	Negative type
Max. current consumption .....	0.25 A
Display unit:	
Dimensions (W × H × D)	
.....	119 × 37 × 20 mm
Weight .....	0.1 kg
Hideaway unit:	
Dimensions (W × H × D)	
.....	100 × 28 × 136 mm
Weight .....	0.3 kg
Wavelength .....	940 nm ±50 nm
Output .....	typ; 12 mw/sr per Infrared LED

#### Note

Specifications and the design are subject to possible modifications without notice due to improvements.



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